SPECIFICATIONS

Current rating:
15 amps (1800 watts at 120 VAC)

Line Cords:
6 ft. captive, 14 AWG, with 3-conductor Edison Plug

Lamps (if present):
2 x 5 watts

AC Voltmeter (if present):
Range 60 to 150 VAC; accuracy +/- 2 VAC

Operating Voltage:
90 to 140 VAC

Spike Protection Modes (M-8, M-8L, M-8D):
Line to neutral

Spike Clamping Voltage(M-8, M-8L, M-8D):
188 Vpk @ 3,000 amps, (133 VAC RMS)

Maximum surge current (M-8, M-8L, M-8D):
4,500 amps

Noise attenuation (M-8, M-8L, M-8D):
Transverse mode: Greater than 50 dB, 1 to 100 MHz

Mechanical:
Dimensions(M-8, M-8L, M-8D):
1.75" H x 19" W x 7.5" D.
Dimensions(M-10):
1.75" H x 19" W x 3.96" D.
Weight: 5 lbs (2.3 kg).
Construction: Steel chassis, black painted

Power Consumption:
M-8, 6 watts
M-8L, 14 watts
M-8D, 14 watts
M-10, 0 watts

Safety Agency Listings:
TUV, TUV-C

FURMAN
Furman Sound, Inc.
1997 South McDowell Blvd.
Petaluma, California 94954-6919 USA
Phone: 707-763-1010 Fax: 707-763-1310
Web: www.furmansound.com
E-mail: info@furmansound.com

111904-D

owner's manual

MERIT SERIES
Power Conditioners

M-8 M-8L M-8D M-10

FURMAN
PURIFY YOUR POWER

M-10 Features:

- Ten convenient outlets
- Rack mountable chasis
- 15 amp rating, with circuit breaker
- One year limited warranty

M-8 Features:

- RFI / EMI Filtering
- Surge & Spike Protection
- Eight rear panel outlets and one front panel outlet
- 15 amp rating, with circuit breaker
- One year limited warranty

M-8L Features:

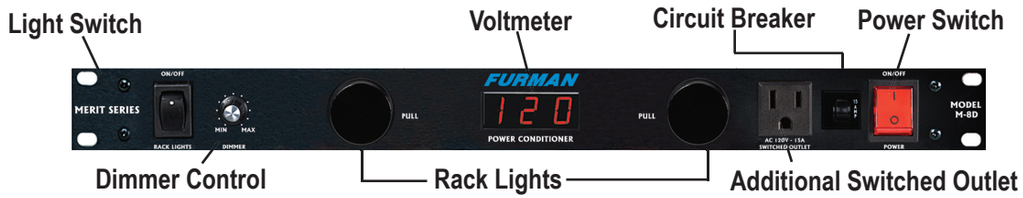
- RFI / EMI Filtering
- Surge & Spike Protection
- Eight rear panel outlets and one front panel outlet
- 15 amp rating, with circuit breaker
- One year limited warranty
- Two retractable incandescent light fixtures with dimmer control for convenient rack illumination

M-8D Features:

- RFI / EMI Filtering
- Surge & Spike Protection
- Eight rear panel outlets and one front panel outlet
- 15 amp rating, with circuit breaker
- One year limited warranty
- Two retractable incandescent light fixtures with dimmer control for convenient rack illumination
- Digital Voltmeter displays incoming line voltage

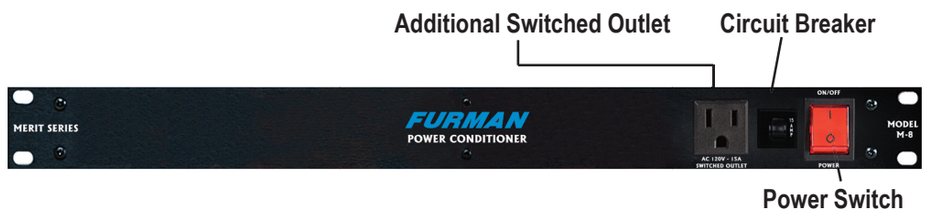
THE FURMAN MERIT SERIES

M-8D



M-8L

M-8



M-10

IMPLIED, INCLUDING BUT NOT LIMITED TO THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. Manufacturer does not warrant against damages or defects arising out of improper or abnormal use of handling of the Product; against defects or damages arising from improper installation, against defects in products or components not manufactured by Manufacturer, or against damages resulting from such non-Manufacturer made products or components. This warranty shall be cancelable by Manufacturer at its sole discretion if the product is modified in any way without written authorization from Furman Sound. This warranty also does not apply to Products upon which repairs have been affected or attempted by persons other than pursuant to written authorization by Manufacturer.

THIS WARRANTY IS EXCLUSIVE. The sole and exclusive obligation of Manufacturer shall be to repair or replace the defective Product in the manner and for the period provided above. Manufacturer shall not have any other obligation with respect to the Products or any part thereof, whether based on contract, tort, strict liability or otherwise. Under no circumstances, whether based on this Limited Warranty or otherwise, shall Manufacturer be liable for incidental, special, or consequential damages. Manufacturer's employees or representatives' ORAL OR OTHER WRITTEN STATEMENTS DO NOT CONSTITUTE WARRANTIES, shall not be relied upon by Purchaser, and are not a part of the contract for sale or this limited warranty. This Limited Warranty states the entire obligation of Manufacturer with respect to the Product. If any part of this Limited Warranty is determined to be void or illegal, the remainder shall remain in full force and effect.

SERVICE

Before returning any equipment for repair, please be sure that it is adequately packed and cushioned against damage in shipment, and that it is insured. We suggest that you save the original packaging and use it to ship the product for servicing. Also, please enclose a note giving your name, address, phone number and a description of the problem.

NOTE: All equipment being returned for repair must have a Return Authorization (RA) Number. To get an RA Number, please call the Furman Service Department: (707) 763-1010, ext. 121. Please display your RA Number prominently on the front of all packages.

THE FURMAN MERIT SERIES

INTRODUCTION

Thank you for purchasing a Furman Merit Series Power Distributor or Conditioner, and congratulations on your choice. The Merit Series power conditioners feature excellent surge protection as well as RFI / EMI filtration.

SAFETY INFORMATION

To obtain best results from your Furman Merit Series unit, please read this manual carefully before using.

WARNING

To reduce the risk of electrical shock, do not expose this equipment to rain or moisture. Dangerous high voltages are present inside the enclosure. Do not remove the covers. Refer servicing to qualified personnel only. The lightning flash with an arrowhead symbol is intended to alert the user to the presence of un-insulated dangerous voltage within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock.

IMPORTANT SAFETY INSTRUCTIONS

(Please read prior to installation)

1. Please read and observe all safety and operating instructions before installing your Merit Series unit. Retain these instructions for future reference.

2. Your Merit Series unit should not be used near water – for example, near a bathtub, washbowl, kitchen sink, laundry tub, in a wet basement, near a swimming pool, etc.

3. Do not place your Merit Series unit near heat sources such as radiators, heat registers, stoves, or other appliances that produce heat.

4. The Merit Series units should only be connected to a 120 VAC, 60Hz, 15 amp grounded electrical outlet. Do not defeat the ground or change polarization of the power plug.

5. Route the power cord and other cables so that they are not likely to be walked on, tripped over, or stressed. Pay particular attention to the condition of the cords and cables at the plugs, and the point where they exit your Merit Series unit. To prevent risk of fire or injury, damaged cords and cables should be replaced immediately.

6. Clean your Merit Series unit with a damp cloth only. Do not use solvents or abrasive cleaners. Never pour liquid on or into the unit.

7. Your Merit Series unit should be serviced by qualified service personnel when:

- The power supply cord or the plug has been frayed, kinked, or cut.
- Objects have fallen or liquid has spilled into the unit.
- The unit has been exposed to rain or other moisture.
- The unit does not appear to operate normally.
- The unit has been dropped, or the enclosure has been damaged.
- The retractable lights have failed.

8. Your Merit Series unit requires that a safety ground be present for proper operation. Any attempt to operate the unit without a safety ground is considered improper operation and could invalidate the warranty.

9. Do not attempt to service your Merit Series unit beyond what is described in this manual. All other servicing should be referred to qualified service personnel.

FEATURES

M-10
The M-10 power distributor is a convenient way to power your rack. It provides 10 outlets on its rear panel and carries a 15 amp rating with a circuit breaker.

M-8
The M-8 power conditioner provides 9 switched outlets for powering equipment. It not only protects anything plugged into it from spikes and surges, but also has a built in AC noise filter to rid the system of RFI / EMI interference. This allows equipment to function better and last longer.

M-8L
In addition to features of the M-8, the M-8L features incandescent rack lights. A dimmer control for the rack lights allows the user to adjust the level of illumination or simply switch the lights off. The M-8L has a master switch for all outlets that glows red when the power is on. The front-panel circuit breaker can be quickly and easily reset should the unit be overloaded. The M-8L also features 5.5 feet of 14 gauge heavy-duty power cable.

M-8D
In addition to all the features of the M-8 and M-8L, the M-8D offers a laboratory precision digital meter that displays incoming voltage in 1-volt steps. The voltmeter's accuracy is ±2 volts.

The M-8D has a master switch for all outlets that glows red when the power is on. The front-panel circuit breaker can be quickly and easily reset should the unit be overloaded. The M-8D also features 5.5 feet of 14 gauge heavy-duty power cable.

OPERATION

Retractable Rack Lights and Dimmer Control:

The M-8L and M-8D utilize a dimmer control for the two retractable front panel light tubes. The dimmer knob controls the brightness of both light fixtures. Turn it clockwise to increase brightness; turn it counterclockwise to decrease brightness. When the lights are not in use, we recommend turning the racklight's switch to off to better maximize the life of the bulbs.

Digital Voltmeter: (M-8D)
Furman's digital voltmeter continually measures incoming voltages within a typical tolerance of +/-2VAC. It should be noted that the voltage reading is incoming. No adjustment should be necessary on these units.

NOTE: The Merit Series units do not compensate for high or low line voltage. If you frequently move your rack to different locations, derive power from generators, use long extension cords, travel internationally, or are in an area prone to brownouts, you may benefit from the use of one of Furman's AC Line Voltage Regulators.

On/Off Rocker Switch:
This 15 amp capacity power switch is specifically designed to stand up to the enormous high inrush current demands of many Power Amplifiers. Additionally, the semi-transparent rocker lights when switched to the "ON" position.

TROUBLESHOOTING GUIDE

1.) Symptom: No power to the AC outlets.

Possible Cause: Circuit breaker has tripped due to excessive load.

Action Needed: Remove one piece of equipment from the Merit Series unit, and push the square re-set tab into the Circuit breaker bezel.

THE FURMAN MERIT SERIES

2.) Symptom: No power to the AC outlets,

Possible Cause: Either the AC outlet to which your Merit Series device is connected has no AC voltage present, or the unit has been subjected to a sustained voltage in excess of 400 Volts.

Action Needed: Plug the Merit Series unit into an AC receptacle where AC voltage is present. If the problem persists, the protection circuit may be damaged, and require factory service.

DEFINITIONS

SPIKE: This is a pulse of energy on the power line. Spikes can have voltages as high as 6000 volts. Though they are usually of very short duration, the energy they contain can be considerable, enough to damage sensitive solid-state components in audio and computer equipment. Spikes can also foul switch contacts and degrade wiring insulation. They are an unavoidable component of electric power. They are caused unpredictably by electric motors switching on or off (on the premises or outside), utility company maintenance operations, lightning strikes and other factors. Spikes (also called surges or transients) are absorbed by special components in the Merit Series to provide safe voltage levels to protect your equipment.

RFI/EMI INTERFERENCE: Noise from RFI (Radio Frequency Interference) or EMI (Electro Magnetic Interference) involves lower voltages and less energy than is found in spikes, but it is continuous rather than transient in nature. It is not likely to cause damage, but it can certainly be annoying, producing static in audio circuits, "snow" on video screens, or garbled data in computers. Noise can be introduced into AC lines by nearby radio transmitters, certain kinds of lighting, electric motors, and other sources. Because noise occurs at higher frequencies than the 50 or 60 Hz AC line, it can be effectively reduced through use of low-pass filtering.

ONE YEAR LIMITED WARRANTY

Furman Sound, Inc., having its principal place of business at 1997 South McDowell Blvd., Petaluma, CA 94954 ("Manufacturer") warrants its Merit Series (the "Product") as follows:

Manufacturer warrants to the original Purchaser of the Product that the Product sold hereunder will be free from defects in material and workmanship for a period of one year from the date of purchase. The Purchaser of the product is allowed fifteen days from the date of purchase to complete warranty registration by mail or on-line at the Furman website. If the Product does not conform to this Limited Warranty during the warranty period (as herein above specified), Purchaser shall notify Manufacturer in writing of the claimed defects. If the defects are of such type and nature as to be covered by this warranty, Manufacturer shall authorize Purchaser to return the Product to the Furman factory or to an authorized Furman repair location. Warranty claims should be accompanied by a copy of the original purchase invoice showing the purchase date; this is not necessary if the Warranty Registration was completed either via the mailed in warranty card or on-line website registration. Shipping charges to the Furman factory or to an authorized repair location must be prepaid by the Purchaser of the product. Manufacturer shall, at its own expense, furnish a replacement Product or, at Manufacturer's option, repair the defective Product. Return shipping charges back to Purchaser will be paid by Manufacturer.

THE FOREGOING IS IN LIEU OF ALL OTHER WARRANTIES, EXPRESS OR